### why ChitosanS now?

#### MARKET asks for eco-products:

**ChitosanS** are consumer-safe, environment-friendly, non-toxic, non-allergenic, biodegradable, biocompatible.

#### **INDUSTRY** asks for biopolymers:

**ChitosanS** are versatile and bioactive 'basic substances' with superior material and functional properties.

#### **SOCIETY** asks for sustainability:

**ChitosanS** are derived from the abundant renewable resource chitin available from different waste materials.

#### SCIENCE asks for challenges:

ChitosanS are naturally polydisperse materials with complex functionalities and unknown modes of action.

#### FROM FIRST TO THIRD GENERATION ChitosanS

**ChitosanS** are a family of biomolecules with remarkable properties and functionalities.

FIRST GENERATION ChitosanS were rather poorly defined mixtures of polymers of varying purity and varying composition – mostly unfit for the development of successfully marketable products; these chitosans were dominating the market for decades and are still widespread today.

**SECOND GENERATION ChitosanS** are well defined in terms of their degrees of polymerization and acetylation – more suitable for the development of reliable products due to known molecular structure-function relationships; these chitosans are now increasingly appearing on the market.

THIRD GENERATION ChitosanS will be even less polydisperse, or even monodisperse in the case of oligomers, with non-random patterns of acetylation, defined biological activities, and known cellular modes of action; these chitosans will create new market opportunities in future.

#### important deadlines

Abstract Submission: April 10<sup>th</sup>, 2015 Travel Award Applications: June 12<sup>th</sup>, 2015 Early Registration: May 31<sup>st</sup>, 2015 Regular Registration: June 30<sup>th</sup>, 2015 Late Registration: July 31<sup>st</sup>, 2015 Proceedings Submission: September 30<sup>th</sup>, 2015

#### registration fees

EUCHIS / ICCC	early	regular	late	onsite
normal *	450€	500€	550€	600€
student *	250€	300€	350€	400€
Technical Workshop				
normal	100€	120 €	140 €	200€
student	50€	60€	70 €	100€
	* members of EUCHIS etc.: 50 € reduction applies			

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#### more information and contact

info@chitin2015.eu www.chitin2015.eu

#### organizers

Conference Chairs Bruno M. Moerschbacher Martin G. Peter

#### **European Chitin Society**

president: Angeles Heras vice presidents: Malgorzata Jaworska Manuela Pintado secretary: Jacques Desbrieres

#### Local Organizing Committee

Bruno M. Moerschbacher Francisco M. Goycoolea Nour Eddine El Gueddari Ursula Windmüller Katja Richter Anne Vortkamp Cordula Kurth



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12<sup>th</sup> International Conference of the European Chitin Society

13<sup>th</sup> International Conference on Chitin and Chitosan

## MÜNSTER Germany

August 30<sup>th</sup> - September 2<sup>nd</sup> 2015

#### on behalf of the European Chitin Society

EUCHIS we cordially invite

#### everyone interested in the Science and Business of Chitin and ChitosanS

to join the 12<sup>th</sup> EUCHIS ICCC 13<sup>th</sup>

from August 30<sup>th</sup> - September 2<sup>nd</sup> 2015 in Münster, Germany



#### **ChitosanS** are entering a new era!

Chitosan has been a 'promising' biomaterial for fifty years due to the superior material properties and the diverse biological activities reported, but chitosan-based products were slow to enter the market due to poor reproducibility in production processes and product performances. This picture is changing now as we understand chitosan to be a family of biomolecules differing in structures and functions, and as research of the past decades has elucidated detailed molecular structure-function relationships of these many chitosans.



**ChitosanS** have strong resistance inducing and growth promoting activities in many crop plants. (Dr. Nannen, Dr. Moerschbacher)

Chitosan-based products are increasingly appearing on the markets, and these are not only products based on the material properties of the chitosans, but also on their biological functionalities. Recently, demand for chitosans is exceeding for the first time the supply of high quality material available. And chitosan has been classified as a "basic substance" by the European Commission in 2014, offering great opportunities for a bright future, in particular for chitosans in agriculture. Still, the cellular modes of action of chitosans are far from being fully understood so that plenty of scientific challenges also remain, in particular to understand the many biomedical activities of chitosans, and to then exploit them in a broad range of new pharmaceutical applications. In this exciting situation, we are inviting you to join us in Münster, to learn about the latest developments in understanding structure-function relationships and modes of action of chitosans and their derivatives, about new ways to biotechnologically produce, modify, and analyse chitosans, about reliable assays on physico-chemical properties and biological functionalities of chitosans, about new and upcoming chitosan-based products and markets, about... Come to meet and interact with academic and industrial scientists, with producers and users of chitosans, with registration and marketing experts interested and responsible for chitosan-based products, with...

# 12<sup>th</sup> EUCHIS / ICCC 13<sup>th</sup> will particularly focus on being a platform for young scientists to share their results and ideas, and on bridging the gap between academic research and industrial product or process development.

The conference will be preceded by a Young Researchers Symposium reserved for doctoral and early post-doctoral researchers, and followed by a Technical Workshop on analytical tools for structural and functional analyses of chitin and chitosans. We will reserve plenty of time for interactive poster sessions, organize an Exhibition of ongoing large chitosan-related projects, chitosanbased products, and chitosan-relevant technologies, and offer match-making opportunities to meet with other participants of your choice, in particular to facilitate discussions between young and experienced researchers, as well as between scientists from academia and industry.



**ChitosanS** can keep wounds clean and can promote scar-free wound healing even in case of severe burns. (Dr. Gillet)